

MEMORANDUM

SUBJECT: ENGINEERING EVALUATION/COST ANALYSIS APPROVAL
MEMORANDUM for the Gulfco Marine Maintenance Superfund Site (Site),
Freeport, Brazoria County, Texas

FROM: Charles Faultry, Associate Director
Remedial Branch
Superfund Division (6SF-L)

TO: Samuel Coleman, P.E., Director
Superfund Division (6SF)

PURPOSE:

Pursuant to Section 104 (b)(1) of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), as amended, and 40 CFR Part 300.415(b)(4) of the National Oil and Hazardous Substances Contingency Plan (NCP), this memorandum is to request your approval to conduct an Engineering Evaluation/Cost Analysis (EE/CA) as part of a Non-Time-Critical Removal Action. The EE/CA will help determine the selection of a feasible and cost effective non-time critical removal action remedy at the Gulfco Marine Maintenance Superfund Site. This EE/CA will address the sediment and soil areas located north of Marlin Avenue and the former surface impoundments. The EE/CA will be conducted as a fund lead project because the potentially responsible party (PRP) group has declined to sign a consent order to perform this work.

JURISDICTION:

Authority vested in the President of the United States by Sections 104, and 106(a) of CERCLA has been delegated to the Administrator of the U.S. Environmental Protection Agency ("EPA") by Executive Order No. 12580, January 23, 1987, 52 Federal Register 2923. CERCLA Section 104(b) investigative authority, including the authority to authorize an EE/CA, has been delegated to the Regional Administrator, EPA Region 6, by EPA Delegation 14-8-A (September 13, 1987), and redelegated to the Superfund Division Director by Region 6 Delegation R6-14-8-A (March 15, 1995). The authority to make a determination of Imminent and Substantial Endangerment under CERCLA Section 106 was delegated to the Regional Administrator, Region 6, by Delegation 14-14-A (April 15, 1994), and redelegated to the Superfund Division Director by Delegation R6-14-14-A (March 15, 1995).

BACKGROUND:

The Site includes 40 acres located in Freeport, Texas at 906 Marlin Avenue within the 100-year coastal floodplain along the north bank of the Intracoastal Waterway. Marlin Avenue divides the Site into two areas. The property north of Marlin Avenue (the North Area) consists of wetlands and undeveloped land and the closed surface impoundments, while the property south of Marlin Avenue was developed for industrial uses with a dry dock, sand blasting areas, an aboveground storage tank farm, and two barge slips connected to the Intracoastal Waterway.

Adjacent property around the North Area is undeveloped. Adjacent property to the east along the Intracoastal Waterway is used for industrial purposes while to the west the property is currently vacant and previously served as a commercial marina. Residential areas are located south of Marlin Avenue approximately 500 feet west of the Site and 1,000 feet east of the Site.

The primary Site operations consisted of draining, cleaning, and repair of various chemical barges. The Site included three surface impoundments, which were earthen pits with natural clay liners located on Lot 56 north of Marlin Avenue. Beginning in 1971, the impoundments were used for storage of waste oils, caustics, various organic chemicals, and waste wash waters generated during barge cleaning activities. The impoundments were closed in 1982 by removing the liquids and most of the sludges. The remaining sludges were solidified with soil and capped with a 3-foot thick clay cover and a hard wearing surface (shell). Currently, the thickness of the cap varies between 2.5 feet and 3.6 feet and the cap is rutted across the western end.

THREATS TO PUBLIC HEALTH, WELFARE, OR THE ENVIRONMENT:

The PRP group has performed investigations of the Gulfco site. The investigations are reported in the Nature and Extent Data Report (May 2009). These investigations found the following hazardous substances in the sediments and/or soil of the North Area of the Gulfco Site: arsenic, barium, chromium, copper, lead, zinc, 4,4-DDT, endrin keytone, gamma chlordane, Aroclor-1254, and polynuclear-aromatic hydrocarbon (PAH) compounds.

The cap over the former impoundments is designed to prevent the migration of hazardous substances in the sludges and shallow groundwater below the cap. A reduction of the integrity of the cap may increase the potential for migration of these hazardous substances to the adjacent wetlands and surface water. The hazardous substances contained in the shallow groundwater below the cap include the following: 1,1,1-trichloroethane, 1,1-dichloroethene, 1,2,3-trichloropropane, 1,2-dichloroethane, benzene, cis-1,2-dichloroethene, methylene chloride, tetrachloroethene, trichloroethene, and vinyl chloride.

These chemicals are hazardous substances as defined by CERCLA in Section 101(14), 42 U.S.C. Section 9601(14), and the NCP in Section 40 CFR Part 302.4. The presence of hazardous substances at the Gulfco Site presents a risk to public health or the environment.

ENDANGERMENT DETERMINATION:

Actual or threatened releases of hazardous substances at and from the Site, if not addressed by a response action, may present an imminent and substantial endangerment to public health, or welfare, or the environment.

ENFORCEMENT ACTIONS:

EPA has performed a PRP search to determine the identities of those who owned/operated the Site and for those who arranged for disposal of hazardous substances at the Site. A UAO was issued to 5 PRPs on May 23, 2005. The UAO was amended on July 14, 2005 to add a sixth PRP and make the effective date July 29, 2005. The PRPs continue to perform the RI/FS under the UAO.

Enforcement Assessment will evaluate the findings of the EE/CA to determine the PRPs for any work identified. The EPA will offer the PRPs an opportunity to conduct or finance subsequent removal actions.

PROPOSED PROJECT AND COSTS:

The EE/CA project will involve the evaluation of technologies that can address the contamination found in the soils and/or sediments of the North Area of the Site, and the repair of the cap over the former impoundments. Significant additional data collection is unlikely due to the amount of data that already exists, although some data collection may be required.

Because the PRP group has declined to sign a consent order to perform this EE/CA, the work will be conducted as a fund lead action. The costs to complete the EE/CA are expected to be about \$200,000.

The ultimate Non-time Critical Removal Action addressing the contamination will be thorough, and the cleanup standards will be risk-based and consistent with the remainder of the work at the Site.

CONCLUSIONS:

Conditions at the Gulfco Site meet the criteria for removal actions taken pursuant to Section 104(b) of CERCLA see 40 CFR Section 300.415(a)(3). That is, it is clear from the information gathered regarding the Site that EPA has reason to believe that a release has occurred or is about to occur, or that illness, disease, or complaints thereof may be attributable to exposure to a hazardous substance, pollutant, or contaminant and that a release may have occurred or be occurring at the Site. Furthermore, a planning period in excess of six months exists, and therefore, pursuant to 40 CFR Section 300.415(b)(4)(i), the conduct of an EE/CA for a Non-time Critical Removal Action is appropriate.

APPROVAL:

You may indicate your approval by signing below:

Samuel Coleman, P.E., Director
Superfund Division (6SF)

Date

Miller	Sanchez	Williams	Faultry	Shade	Johnson	Nann	Peycke
6SF-RA	6SF-RA	6SF-R	6SF-R	6SF-TE	6SF-TE	6RC-S	6RC-S